AMENDMENTS TO THE CLAIMS

Without prejudice, this listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-9. (Canceled).

10. (Currently Amended) A microwave oscillator comprising:

a heatsink;

a hollow conductor;

an oscillation generator mounted on the heatsink and projecting into the hollow conductor; [[and]]

a printed circuit board having electronic components for supplying direct voltage to the oscillation generator, and

a stripline situated on the printed circuit board, the stripline being coupled to a microwave field within the hollow conductor and being guided out of the hollow conductor as a microwave output,

wherein one of (a) the printed circuit board and (b) a metal layer situated one of (1) on, (2) in, and (3) under the printed circuit board forms a wall of the hollow conductor, and the oscillation generator and the heatsink are situated in the printed circuit board,

wherein the hollow conductor is expanded to form a resonator chamber in an area of the oscillation generator, and

wherein the hollow conductor is impervious to a fundamental wave in the resonator chamber, and a distance between the stripline and the resonator chamber is greater than a decay distance of the fundamental wave.

11. (Previously Presented) The microwave oscillator according to claim 10, further comprising a conductive structure situated on the printed circuit board, forming a lowpass filter, and being connected electrically to the oscillation generator and the components for supplying direct voltage to the oscillator generator.

12. (Canceled).

13. (Canceled).

14. (Canceled).

15. (Currently Amended) ~~The microwave oscillator according to claim 10, further comprising~~ A microwave oscillator comprising:

a heatsink;

a hollow conductor;

an oscillation generator mounted on the heatsink and projecting into the hollow conductor;

a printed circuit board having electronic components for supplying direct voltage to the oscillation generator; and

an adjustable resonator disc situated in the hollow conductor diametrically opposite the oscillation generator,

wherein one of (a) the printed circuit board and (b) a metal layer situated one of (1) on, (2) in, and (3) under the printed circuit board forms a wall of the hollow conductor, and the oscillation generator and the heatsink are situated in the printed circuit board.

16. (Currently Amended) ~~The microwave oscillator according to claim 10, further comprising~~ A microwave oscillator comprising:

a heatsink;

a hollow conductor;

an oscillation generator mounted on the heatsink and projecting into the hollow conductor;

a printed circuit board having electronic components for supplying direct voltage to the oscillation generator; and

a choke piston for closing the hollow conductor at one end, the choke piston being in electrical contact with a metallic coating one of on, in, and under the printed circuit board,

wherein one of (a) the printed circuit board and (b) a metal layer situated one of (1) on, (2) in, and (3) under the printed circuit board forms a wall of the hollow

conductor, and the oscillation generator and the heatsink are situated in the printed circuit board.

17. (Previously Presented) The microwave oscillator according to claim 10, further comprising a metallic base plate situated on a side of the printed circuit board facing away from the hollow conductor, the metallic base plate being electrically connected to other walls of the hollow conductor and being in thermal and electrical contact with the heatsink.

18. (Currently Amended) The microwave oscillator according to claim 10, A microwave oscillator comprising:

a heatsink;

a hollow conductor;

an oscillation generator mounted on the heatsink and projecting into the hollow conductor; and

a printed circuit board having electronic components for supplying direct voltage to the oscillation generator;

wherein one of (a) the printed circuit board and (b) a metal layer situated one of (1) on, (2) in, and (3) under the printed circuit board forms a wall of the hollow conductor, and the oscillation generator and the heatsink are situated in the printed circuit board, and

wherein the printed circuit board has at least one continuous metallic coating, which is electrically connected to other walls of the hollow conductor.